

PROJECT DESCRIPTION  
GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC SIGNAL AT MD 30 AT BRODBECK ROAD/ EAGLE RIDGE COURT IN CARROLL COUNTY. MD 30 IS CONSIDERED TO RUN IN A NORTH/ SOUTH DIRECTION.

MD 30 SHALL BE WIDENED ON THE WEST SIDE TO CREATE A RIGHT TURN LANE. BRODBECK ROAD SHALL BE WIDENED ON THE SOUTH SIDE TO CREATE A LEFT, LEFT THRU AND RIGHT TURN LANES.

INTERSECTION OPERATION

A NEW BASE MOUNTED NEMA 6 CABINET AND CONTROLLER SHALL BE INSTALLED AT THIS LOCATION. THE INTERSECTION WILL OPERATE IN A FULLY ACTUATED MODE USING 6 NEMA PHASES. THERE WILL CONTINUE TO BE AN EXCLUSIVE/PERMISSIVE LEFT TURN PHASE FOR BOTH THE NORTH AND SOUTHBOUND MOVEMENTS OF MD 30. THE MD 30 THROUGH MOVEMENTS WILL OPERATE CONCURRENTLY. THE BRODBECK ROAD/ EAGLE RIDGE COURT MOVEMENTS WILL OPERATE IN A SIDE STREET SPLIT PHASE MODE.

1. THE FOLLOWING CONTACT PERSONS FOR THIS PROJECT ARE AS FOLLOWS:

PROJECT CONTACTS:

MR. JOHN CONCANNON, ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (301) 624-8140  
MR. JOHN HUCHROWSKI, ASSISTANT DISTRICT ENGINEER - CONSTRUCTION  
PHONE: (301) 624-8200  
MS. SUE PALMER, ASSISTANT DISTRICT ENGINEER - MAINTENANCE  
PHONE: (301) 624-8105  
MS. ANDREA ABEND, UTILITY ENGINEER  
PHONE: (301) 624-8115  
MR. RICHARD L. DAFF, SR. CHIEF TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630  
MR. EDWARD RODENHIZER, SUPERVISOR, SIGNAL OPERATIONS  
PHONE: (410) 787-7652

THE POWER COMPANY REPRESENTATIVE IS:  
BRANDON ELLINGSON  
BALTIMORE GAS & ELECTRIC  
1068 NORTH FRONT STREET, ROOM 500  
BALTIMORE, MD 21202  
410-470-8345  
WMS #1976556

2. ALL INTERNAL CABINET WIRING SHALL BE PERFORMED BY THE SHA SIGNAL SHOP. CONTRACTOR SHALL CONTACT ED RODENHIZER 72 HOURS PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT 410-787-7631 TO ARRANGE FOR THE PHONE DROP INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER WITH THE NEAREST STREET NUMBER, ZIP CODE, AND TELEPHONE NUMBER.

EQUIPMENT LIST

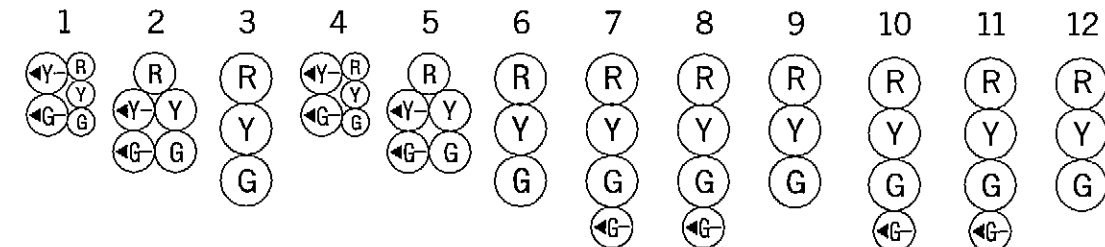
A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION.

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

| Quantity | Units | Description   |
|----------|-------|---|
| Lump Sum | LS    | Mobilization.   |
| Lump Sum | LS    | Maintenance of traffic.   |
| 1        | EA    | 27 ft. steel mast arm pole with a 38 ft. mast arm.  |
| 1        | EA    | 27 ft. steel mast arm pole with a 60 ft. mast arm.  |
| 1        | EA    | 15 Luminaire arm.   |
| 1        | EA    | 250 W HPS luminaire and lamp.   |
| 1        | EA    | Base mounted NEMA 6 cabinet with video detection interface and four- channel loop detector amplifiers<br>(Note: Cabinet shall be purchased from Echolite and delivered to the S.H.A. Signal Shop for wiring and testing. Contact Mr. Ed Rodenhizer (410) 787-7650). |
| 2        | EA    | 12 in., one-way, three section L.E.D. (R,Y,G) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.   |
| 4        | EA    | 12 in., one-way, four section L.E.D. (R,Y,G,GA) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.   |
| 1        | EA    | 1 2 in., one-way, five section L.E.D. (R,Y,G,GA,YA) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.   |
| 1        | EA    | 1 2 in., one-way, five section L.E.D. (R,Y,G,GA,YA) adjustable black faced traffic signal head with mast arm mounting hardware and tunnel visors.   |
| 4        | EA    | Video Detection Camera (Terra).   |
| 735      | LF    | Video Detection Camera cable.   |
| 1        | EA    | 30 in. x 36 in. R 3-5(L) sign with mast arm mounting hardware.  |
| 1        | EA    | 30 in. x 36 in. R 3-6(L) sign with mast arm mounting hardware.  |
| 2        | EA    | 24 in. x 30 in. R 4-7 sign for ground mount.  |
| 2        | EA    | 18 in. x 18 in. DM 1-1 sign for ground mount.   |
| 2        | EA    | Non-invasive micro loop probe (set of 3) with 1000 foot lead-in cable.  |
| 2        | CY    | Test pit.   |
| 3        | EA    | Handhole.   |
| 50       | LF    | 1-conductor electrical cable (No. 8 A.W.G.).  |
| 350      | LF    | 2-conductor electrical tray cable (No. 12 A.W.G.).  |
| 80       | LF    | 5-conductor electrical cable (No. 14 A.W.G.).   |
| 1535     | LF    | 7-conductor electrical cable (No. 14 A.W.G.).   |
| 265      | LF    | Bare copper stranded ground wire (No. 6 A.W.G.).  |
| 30       | LF    | 2 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.   |
| 360      | LF    | 3 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.   |
| 20       | LF    | 4 in. polyvinyl chloride [Schedule 80] electrical conduit - trenched.   |
| 200      | LF    | 4 in. polyvinyl chloride [Schedule 80] electrical conduit - bored.  |
| 9.25     | CY    | Concrete foundation for traffic signal equipment.   |
| 5        | EA    | Ground rod - 3/4 in. diameter x 10 ft. length.  |
| 1        | EA    | 100 amp electrical meter pedestal for an underground electric service.  |
| 95       | LF    | 24 in. wide thermoplastic pavement marking - white for stop line.   |
| 1        | EA    | Cut, clean, and cap mast arm pole.  |
| 28       | LF    | 4 in. x 4 in. wood sign support.  |
| 6        | EA    | Relocate existing sign (mast arm mount).  |
| 1        | EA    | Relocate existing signal head.  |
| 620      | LF    | Pull back and re-route existing non-invasive micro-loop probe cable.  |
| 3        | EA    | Remove and dispose of existing concrete foundation 12 in. below grade.  |
| Lump Sum | LS    | Remove and dispose of existing signal equipment.  |

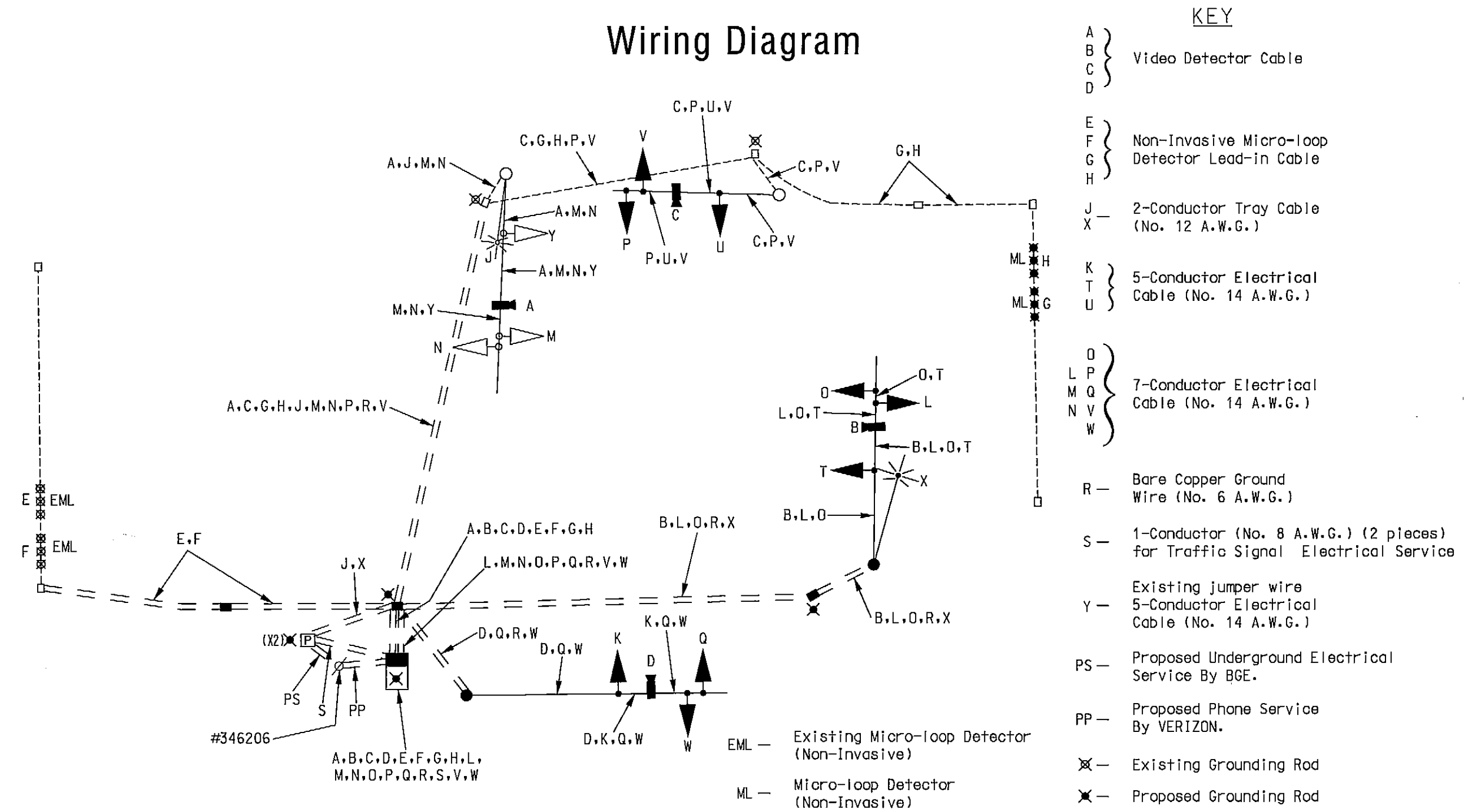
C. SHA FORCES SHALL REMOVE THE CONTROLLER AND ALL AUXILIARY EQUIPMENT FROM THE CONTROLLER CABINET. THE CABINET AND ALL OTHER MATERIALS TO BE REMOVED BY THE CONTRACTOR SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

Phase Chart



|  |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|
| PHASE 1 AND 5                                  | ←GR  | ←GR  | R    | ←GR  | ←GR  | R    | R    | R    | R    | R    | R    | R    | R    |
| 1 AND 5 CHANGE TO 1 AND 6, 2 AND 5, OR 2 AND 6 |      |      |      |      |      |      |      |      |      |      |      |      |      |
| PHASE 1 AND 6                                  | ←GG  | ←GG  | G    | R    | R    | R    | R    | R    | R    | R    | R    | R    | R    |
| 1 AND 6 CHANGE                                 | ←YG  | ←YG  | G    | R    | R    | R    | R    | R    | R    | R    | R    | R    | R    |
| PHASE 2 AND 5                                  | R    | R    | R    | ←GG  | ←GG  | G    | R    | R    | R    | R    | R    | R    | R    |
| 2 AND 5 CHANGE                                 | R    | R    | R    | ←YG  | ←YG  | G    | R    | R    | R    | R    | R    | R    | R    |
| PHASE 2 AND 6                                  | G    | G    | G    | G    | G    | G    | R    | R    | R    | R    | R    | R    | R    |
| 2 AND 6 CHANGE                                 | Y    | Y    | Y    | Y    | Y    | Y    | R    | R    | R    | R    | R    | R    | R    |
| PHASE 3  | R    | R    | R    | R    | R    | R    | ←GG  | ←GG  | G    | R    | R    | R    | R    |
| 3 CHANGE                                       | R    | R    | R    | R    | R    | R    | Y    | Y    | Y    | Y    | R    | R    | R    |
| PHASE 4  | R    | R    | R    | R    | R    | R    | R    | R    | R    | ←GG  | ←GG  | G    | R    |
| 4 CHANGE                                       | R    | R    | R    | R    | R    | R    | R    | R    | R    | Y    | Y    | Y    | Y    |
| FLASHING OPERATION                             | FL/Y | FL/Y | FL/Y | FL/Y | FL/Y | FL/Y | FL/R | FL/R | FL/R | FL/R | FL/R | FL/R | FL/R |

Wiring Diagram



STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION  
OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

MD 30 AT BRODBECK ROAD /EAGLE RIDGE COURT

HAMPSTEAD, MD

GENERAL INFORMATION PLAN

SCALE N/A DATE MARCH 24, 2011 CONTRACT NO. BW996MB2

DESIGNED BY J. STORCK COUNTY CARROLL

DRAWN BY J. STORCK LOGMILE 0603004.53

CHECKED BY                      TMS NO. 1590-GI

F.A.P. NO. N/A TOD NO. N/A

TS NO. 3999C DRAWING **GI-01** OF 01 SHEET NO. 2 OF 2

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The Traffic Group, Inc.  
Suite H  
9900 Franklin Square Drive  
Baltimore, Maryland 21236  
410-931-6600  
1-800-583-8411  
Fax 410-931-6601  
"Merging Innovation and Excellence"®

BY: JStorck